KARNATAKA TEST HOUSE PVT. LTD.

MATERIAL TESTING LABORATORY

778/44, Gokul 1st Stage, 2nd Phase, 8th Cross, Triveni Road,
Yeshwanthpur, Bangalore - 560 054. Tel.: 23378383, 23375326,
E-mail : kthblr@gmail.com Website : www.karnatakatesthouse.com

NABL Accredited Laboratory ISO/IEC 17025

SINCE 1989 — Quality Assurance Professionalism — 25 Years

Report No. : KTH/C.AGG/0696-1104e/2014-2015 **Date: 07.07.2014**

TEST REPORT ON AGGREGATE
(Coarse Aggregate)

Name of the Customer* : **The Assistant Executive Engineer,**
Shettyhalli Sub Division,
BBMP, Bangalore.

Name of the Project* : Improvements to roads and drains in Vishala public school road E/s and other road, in ward No.13 in Shettyhalli sub division.

Name of Contractor* : Mr. B.T Ravikumar, Bangalore.

Source of Sample : Supplied by the Contractor.

Sample Received on : 03.07.2014.

Technical Reference : IS : 2386 Part I to VIII– 1963 (Reaffirmed-2002), IS : 383 – 1970.

Sieve Analysis of Coarse Aggregate - 40mm & down size

Sl. No.	Sieve size mm	% Passing	IS : 383-1970 Stipulations		Remarks
			Single Size	Graded Size	
1	63	100	100	100	Sample confirms to single size of IS: Stipulation of 40mm size Aggregate.
2	40	89.90	85 to 100	95 to 100	
3	20	0.10	0 to 20	30 to 70	
4	12.5	-	0 to 20	-	
5	10	-	0 to 5	10 to 35	
6	4.75	-	-	0 to 5	

Sl. No.	Test Conducted	Identification mm	Results	IS : 383 – 1970 Stipulations
1	Flakiness Index (%)	40	12.31	Not specified
2	Elongation Index (%)	40	17.25	Not specified
3	Impact Value (%)	40	23.10	Shall not be more than 45% for Concrete and 30% for Wearing surfaces, such as runways, roads and pavements.

* As furnished by the Customer

For **KARNATAKA TEST HOUSE PVT. LTD.**

AE 13

(SREENIVASA.C)
TECHNICAL MANAGER

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Report No. : KTH/C.AGG/0696-1104e/2014-2015 **Date: 07.07.2014**

TEST REPORT ON AGGREGATE
(Coarse Aggregate)

Name of the Customer* : **The Assistant Executive Engineer,**
Shettyhalli Sub Division,
BBMP, Bangalore.

Name of the Project* : Improvements to roads and drains in Vishala public school road E/s and other road, in ward No.13 in Shettyhalli sub division.

Name of Contractor* : Mr. B.T Ravikumar, Bangalore.

Source of Sample : Supplied by the Customer.

Sample Received on : 03.07.2014.

Technical Reference : IS: 2386 Part I to VIII– 1963 (Reaffirmed-2002), IS : 383 – 1970.

Sieve Analysis of Coarse Aggregate - 20mm

Sl. No.	Sieve size mm	% Passing	IS : 383-1970 Stipulations		Remarks
			Single Size	Graded Size	
1	40	100	100	100	Sample confirms to single size of IS: Stipulation of 20mm size Aggregate
2	20	85.6	85 to 100	95 to 100	
3	16	32.66	-	-	
4	10	17.82	0 to 20	25 to 55	
5	4.75	4.10	0 to 5	0 to 10	

Sl. No.	Test Conducted	Identification mm	Results %	IS : 383 – 1970 Stipulations
1	Flakiness Index (%)	20	12.1	Not specified
2	Elongation Index (%)	20	14.4	Not specified
3	Crushing Value (%)	20	21.6	Shall not be more than 45% for Concrete and 30% for Wearing surfaces, such as runways, roads and pavements.

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Report No. : KTH/CEMENT/0696-1106e/2014-2015 **Date: 11.07.2014**

PHYSICAL TEST REPORT ON CEMENT

Interim 3 & 7 days

Name of the Customer* : **The Assistant Executive Engineer,**
Shettyhalli Sub Division,
BBMP, Bangalore.

Name of the Project* : Improvements to roads and drains in Vishala public school road E/s and other road, in ward No.13 in Shettyhalli sub division.

Name of Contractor* : Mr. B.T Ravikumar, Bangalore.

Source of Sample : Supplied by the Customer.

Type of Cement* : Ordinary Portland cement (OPC)

Brand of Cement* : Birla Super 53 Grade.

Sample Received on : 03.07.2014.

Period of Test : 03.07.2014 to 10.07.2014.

Technical Reference : IS: 4031(Part I–VI) 1988 (Reaffirmed–2000) & IS: 12269-1987.

Sl. No.	Test Conducted	Results	IS : 12269-1987 Stipulation	Remarks
1	Normal consistency	27.5 %	Not specified	-
2	Initial setting time	185 minutes	Shall not be less than 30 minutes	P
3	Final setting time	265 minutes	Shall not be more than 600 minutes	P
4	Compressive strength (Average of three results) a. 72 ± 1h (3 days) b.168 ± 2h (7 days) c. 672 ± 4h (28 days)	 28.35 MPa 38.16 MPa T.T.C	 Shall not be less than 27.0 MPa Shall not be less than 37.0 MPa Shall not be less than 53.0 MPa	 P P -
5	Fineness (By Blaine's air permeability method)	291.1 m^2/kg	Shall not be less than 225 m^2/kg	P
6	Soundness (Le-chatlier's method)	1.01 mm	Shall not be more than 10 mm	P

P: Passes IS requirement F: Fails IS requirement T.T.C: Test To be Conducted.

*As furnished by the Customer

For **KARNATAKA TEST HOUSE PVT. LTD.**

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Report No. : KTH/C.AGG/0696-1105e/2014-2015 **Date: 07.07.2014**

TEST REPORT ON AGGREGATE
(Fine Aggregate)

Name of the Customer* : **The Assistant Executive Engineer,**
Shettyhalli Sub Division,
BBMP, Bangalore.

Name of the Project* : Improvements to roads and drains in Vishala public school road E/s and other road, in ward No.13 in Shettyhalli sub division.

Name of Contractor* : Mr. B.T Ravikumar, Bangalore.

Source of Sample : Supplied by the Customer.

Sample Received on : 03.07.2014.

Technical Reference : IS : 2386 Part I to VIII– 1963 (Reaffirmed-2002), IS : 383 – 1970.

Sieve Analysis of Fine Aggregate

Sl. No.	Sieve size mm	% Passing	IS : 383 – 1970 Specification				Remarks
			% passing for Zone I	% passing for Zone II	% passing for Zone III	% Passing for Zone IV	
1	10	100.0	100	100	100	100	Falls in Zone –II as per table 4 of IS-383 – 1970.
2	4.75	95.8	90 – 100	90 – 100	90 – 100	95 - 100	
3	2.36	90.7	60 – 95	75 – 100	85 – 100	95 - 100	
4	1.18	72.5	30 – 70	55 – 90	75 – 100	90 - 100	
5	0.600	50.7	15 – 34	35 – 59	60 – 79	80 - 100	
6	0.300	9.1	5 – 20	8 – 30	12 – 40	15 to 50	
7	0.150	0.5	0 – 10	0 – 10	0 – 10	0 to 15	

Sl. No.	Test Conducted	Results	IS : 383 – 1970 Stipulations
1.	Materials finer than 75 microns (%) (Deleterious Material)	1.9	Shall not be more than 3.0 %.
2.	Fineness Modulus	2.62	Min - 2.0 Max – 3.5

* As furnished by the Customer

For **KARNATAKA TEST HOUSE PVT. LTD.**

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